

RC 15307.2

We claim:

5 1. An absorbent article, comprising:
a backsheet layer;
a substantially liquid permeable topsheet layer;
an absorbent composite structure sandwiched between said backsheet and
topsheet layers, said absorbent composite including an absorbent core having a first
primary layer region and at least a second primary layer region;
at least one of said first and second primary layer regions having a Liquid Wicking
Value of at least about 38%; and
at least one of said first and second primary layer regions includes a plurality of
10 sublayers.

2. An article as recited in claim 1, wherein said absorbent core has a dry thickness of
not more than about 6 mm, and a minimum crotch width of not more than about 10 cm.

3. An article as recited in claim 1, wherein said article is configured for use by an
adult, and wherein said absorbent core has a dry thickness of not more than about 6 mm,
and a minimum crotch width of not more than about 14 cm.

4. An article as recited in claim 1, wherein said absorbent core has a Combined
Conductance-Wicking Value of at least about $14 \times 10^{-6} \text{ cm}^3$.

5. An article as recited in claim 4, wherein said absorbent core has a dry thickness of
not more than about 6 mm and a minimum crotch width of not more than about 10 cm.

6. An article as recited in claim 1, wherein said first primary layer region is located on
a bodyside of the absorbent composite, and said second primary layer region is located
relatively outward from first layer region.

7. An absorbent article as recited in claim 1, wherein at least one of said primary
layer regions includes a superabsorbent material having a Modified Absorbency Under
Load value of at least about 20 g/g.

8. An absorbent article as recited in claim 1, wherein at least one of said primary layer regions includes a superabsorbent material which exhibits a Tau value of not less than about 0.8 min.

9. An absorbent article which includes an absorbent core having a first primary layer region and at least a second primary layer region; wherein

at least one of said first and second primary layer regions includes a plurality of sublayers;

5 said absorbent core has a longitudinal length, a lateral width and an appointed front-most edge;

said first primary layer region has a basis weight of not less than about 100 g/m² and not more than about 500 g/m² ,

10 said first primary layer region has a first layer region density of not less than about 0.03 g/cm³ and not more than about 0.4 g/cm³ ;

said first primary layer region includes fibrous material in an amount which is not less than about 25 wt% and is not more than about 80 wt%;

said fibrous material includes fibers having fiber sizes which are not less than about 4 μm and not more than about 20 μm;

15 said fibrous material includes fibers which exhibit a water contact angle of not more than about 65 degrees;

said first primary layer region includes a superabsorbent material in an amount which is not less than about 20 wt% and is not more than about 75 wt%;

20 said superabsorbent material includes superabsorbent particles having dry particle sizes which are not less than about 140 μm and are not more than about 1000 μm;

said superabsorbent material has an MAUL value of not less than about 20 g/g; and

said superabsorbent material has a Tau value of not less than about 0.8 min.

10. An article as recited in claim 9, wherein said first primary layer region is substantially coterminous with side edges of said second primary layer region; and

5 said first primary layer region contained within a zone which begins at a laterally extending line positioned about 7% of the core length inboard from said front-most edge of the absorbent core and extends to a laterally extending line positioned about 62% of the core length inboard from said front-most edge of the absorbent core.

11. An article as recited in claim 10, wherein said first primary layer region includes a binder material.

12. An article as recited in claim 9, wherein said second primary layer region includes a plurality of sublayers having uncreped-through-air-dried material.

13. An article as recited in claim 9, wherein said second primary layer region has a longitudinal extent which is greater than a longitudinal extent of said first primary layer region; and said second primary layer region has a lateral extent which is substantially coterminous with said first primary layer region;

14. An article as recited in claim 9, wherein said second primary layer region has a longitudinal extent which is greater than a longitudinal extent of said first primary layer region;

said second primary layer region has a lateral extent which is less than a lateral extent of said first primary layer region; and

a lateral extent of at least a portion of said second primary layer region is not less than about 30% of a lateral extent of a correspondingly adjacent portion of said first primary layer region.

15. An article as recited in claim 9, wherein said second primary layer region has a longitudinal extent which is greater than a longitudinal extent of said first primary layer region;

said second primary layer region has a lateral extent which is greater than a lateral extent of said first primary layer region;

a lateral extent of at least a portion of said first primary layer region is not less than about 30% of a lateral extent of a correspondingly adjacent portion of said second primary layer region.

16. An article as recited in claim 15, wherein said second primary layer region has a substantially uniform basis weight.

17. An article as recited in claim 9, wherein said second primary layer region has a basis weight which is not less than about 300 g/m² and is not more than about 700 g/m²;

said second primary layer region has a second layer region density of not less

than about 0.1 g/cm³ and not more than about 0.3 g/cm³;

- 5 said second primary layer region includes fibrous material in an amount which is not less than about 50 wt% and is not more than about 80 wt%;

 said fibrous material includes fibers having fiber diameters which are not less than about 4 µm and not more than about 20 µm;

- said fibrous material includes fibers which exhibit a water contact angle of not
10 more than about 65 degrees;

 said second primary layer region includes a superabsorbent material in an amount which is not less than about 20 wt% and is not more than about 50 wt%; and

 said superabsorbent material includes superabsorbent particles having particle sizes which are not less than about 140 µm, and are not more than about 1000µm.

18. An article as recited in claim 17, wherein said superabsorbent material in said second primary layer region has a MAUL value of not less than about 20 g/g, and has a Tau value of at least about 0.4 minutes.

19. An article as recited in claim 18, wherein said superabsorbent material in said second primary layer region is configured as a superabsorbent layer laminated between layers of uncreped-through-air-dried material.

20. An article as recited in claim 19, wherein said article further comprises a backsheet layer and a substantially liquid permeable topsheet layer which are configured with said absorbent core sandwiched therebetween.

21. An article as recited in claim 20, wherein said absorbent core has a Flow Conductance Value of at least about 4×10^{-6} cm³; and
 at least one of said first and second primary layer regions has a Liquid Wicking Value of at least about 24%.

22. An article as recited in claim 20, wherein at least one of said first and second primary layer regions has a Liquid Wicking Value of at least about 38%.

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